International System of Numeration

The International System of Numeration is a system used to read and write large numbers. It is widely used around the world, especially in countries like the USA, UK, and Canada. In this system, numbers are grouped into periods of three digits each, such as ones, thousands, millions, and billions.

Structure of the International System

In the International System, large numbers are grouped by commas every three digits, starting from the right. The place value chart looks like this:

Place	Ones	Thousands	Millions	Billions
Place Value	1	1,000	1,000,000	1,000,000,000

For example:

1,000 = One thousand

- 1,000,000 = One million
- 1,000,000,000 = One billion

Reading Large Numbers in the International System

To read a large number in this system:

- i. Group the digits into sets of three starting from the right.
- ii. Read each group separately and combine them with their place value.

Writing Large Numbers in Words

To write large numbers in words:

i. Break the number into periods (groups of three digits).

ii. Write each group in words, and then write the place value for each group (thousands, millions, etc.).

Properties of the International System

Commas: In the International System, commas are used every three digits to separate periods (e.g., 1,000; 1,000,000).

Period Grouping: Numbers are grouped into periods of ones, thousands, millions, and billions.

Place Value: The place value of each digit increases by a factor of 10 as we move from right to left.

Example 1

Question: Write the number 5,237,469 in words using the International System of Numeration.

Solution:

5,237,469 = Five million, two hundred thirty-seven thousand, four hundred sixty-nine

Answer: Five million, two hundred thirty-seven thousand, four hundred sixty-nine

Example 2

Question: Write 12,348,910 in words using the International System of Numeration.

Solution:

12,348,910 = Twelve million, three hundred forty-eight thousand, nine hundred ten

Answer: Twelve million, three hundred forty-eight thousand, nine hundred ten

Summary Points

- The International System groups numbers into periods of three digits: ones, thousands, millions, and billions.
- Commas are used to separate these periods to make large numbers easier to read.
- When writing large numbers in words, the period names (thousands, millions, etc.) are added after the number.
- Understanding the place value of each digit is essential to reading and writing large numbers in the International System.